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AN 108:225153 HCA  
TI Surface treatment of endless steel belt  
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SO Jpn. Kokai Tokkyo Koho, 5 pp.  
CODEN: JKXXAF

DT Patent  
LA Japanese  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 63026345	A2	19880203	JP 1986-168922	19860717
	JP 07017998	B4	19950301		

AB The endless belt of **maraging** steel for automotive transmission is preferentially plastic-deformed on its outer surface and then soft **nitrided** to induce a high **residual** compression stress for increasing the bending fatigue strength. In 1.0-8.0% plastic deforming, the belt is tensioned between 2 spaced rollers of given size for a bending strain of more than twice the max. bending strain of the belt in service. Thus, a weld-joined belt of **maraging** steel band of 250-kpsi grade was soln.-treated at .apprx.800.degree., expansion-worked for 1.0%, and soft **nitrided**. The product with the max. bending stress of .apprx.118 kg/mm2 lasted .apprx.107 cycles in service.